IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:		)	
		)	
	Gregory D. Vite, et al.	)	
		)	
Serial No.:	09/084,542	)	Examiner: Bruck Kifle
		)	
Filed:	May 26, 1998	)	Art Unit: 1624
		)	
U.S. Patent:	6,605,599 issued August 12, 2003	)	Conf. No.: 5662
		)	
Title:	Epothilone Derivatives	)	

Mail Stop: The Office of the Solicitor
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

NOTICE OF ARBITRATION AWARD

Pursuant to 35 U.S.C. § 294(d) and 37 C.F.R. § 1.335, the Office is hereby notified of a partial arbitration award made on August 25, 2011, by an arbitration tribunal in the International Court of Arbitration under the Rules of Arbitration of the International Chamber of Commerce ("ICC"). The parties to this arbitration are:

Helmholtz Center for Infection Research GmbH
(Helmholtz-Zentrum für Infektionsforschung GmbH),
Inhoffenstraße 7, 38124 Braunschweig, Germany

v.

Bristol-Myers Squibb Company,
345 Park Avenue, New York, New York 10154, U.S.A.

In accordance with this partial award, the arbitration tribunal determined that Florenz Sasse and Gerhard Höfle should be added as joint inventors in the above-captioned Patent, which currently names Gregory D. Vite, Soong-Hoon Kim, Robert M. Borzilleri, and James A. Johnson as the inventors and Bristol-Myers Squibb Company as the sole owner.

A copy of this award, along with an Addendum approved on November 24, 2011, is included pursuant to 37 C.F.R. § 1.335(a).

If there are any fees due in connection with the filing of this notice, the Commissioner is authorized to charge to Deposit Account 13-2490 in the amount due.

Respectfully submitted,

Date: April 12, 2012

By: /Andrew W. Williams/
Andrew W. Williams
Registration No. 48,644

McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Drive
Chicago, IL 60606
Telephone: (312) 913-0001
Facsimile: (312) 913-0002

INTERNATIONAL CHAMBER OF COMMERCE

INTERNATIONAL COURT OF ARBITRATION

HELMHOLTZ CENTER FOR INFECTION RESEARCH (Germany) vs BRISTOL-MYERS SQUIBB COMPANY (U.S.A.)

Case No. 16993/VRO

PARTIAL AWARD

Parties to the Arbitration

Claimant is Helmholtz Center for Infection Research GmbH, Inhoffenstrasse 7, 38124, Braunschweig, Germany.

Respondent is Bristol-Myers Squibb Company, 345 Park Avenue, New York, New York 10154 U.S. A.

Claimant's representative is Thomas W. Banks, Esq, Finnegan, Henderson, Farabow, Garrett & Dunner LLP, 55 Cambridge Parkway, Cambridge, MA 02142-1215.

Respondent's representative is Paul H. Berghoff, Esq., McDonnell, Boehnen Hulbert and Berghoff, LLP , 300 South Wacker Drive, Suite 3200, Chicago, IL 60606.

Arbitration and Choice-of-law Agreements

The License Agreement dated May 15, 1997 provides at Clause 10.9, "Any dispute arising under this Agreement shall be resolved by arbitration to be held in accordance with the Rules of Conciliation and Arbitration of the International Chamber of Commerce and to be held in Frankfurt am Main, Germany (if the arbitration is initiated pursuant to demand of BMS) or New York, New York (if the arbitration is initiated pursuant to demand of the Licensor). All proceedings are

to be conducted in the English language. Each party shall appoint one arbitrator, and if the party-appointed arbitrators cannot agree on an umpire, the umpire shall be appointed by the President of the International Chamber of Commerce. Any fees and expenses payable with respect to the arbitration shall be borne by the party losing the case. All arbitration rulings and awards shall be final and binding on the parties and shall be enforceable in accordance with the Convention on the Recognition and Enforcement of Foreign Arbitral Awards."

The Collaborative Research Agreement dated May 15, 1997 provides at 11(b), "Any dispute arising under this agreement shall be resolved in accordance with the arbitration procedures as provided in Clause 10.9 of the License Agreement."

Claimant and Respondent identified above are the parties to and the signatories of the arbitration agreements.

The License and Collaboration Agreements shall be governed by and construed and interpreted by the laws of England, as set forth in the License Agreement, Article 10.5, and the Collaboration Agreement, Paragraph 11.(a). Inventorship and ownership of inventions in dispute shall be governed by United States patent law, as set forth in the Collaborative Research Agreement, Paragraph 6(a). (Terms of Reference, Paragraph 156)

Procedural Background

i. The applicable version of the ICC Rules of Arbitration is 1 January 1998, with Cost Scales effective as of 1 May 2010.
ii. The request for arbitration was received by the Secretariat on March 8, 2010.
iii. The Answer was filed on June 7, 2010.
iv. Pursuant to Article 9(2) of the Rules, the co-arbitrators were confirmed by the Secretary General of the Court on May 25, 2010;

and on July 19, 2010 Sir William Aldous was confirmed as Chairman of the Arbitral Panel upon the co-arbitrators' joint nomination.

v. The file was sent to the Arbitral Panel on July 19, 2010.

vi. The Terms of Reference were established on September 20, 2010.

vii. By e mails of April 4 and 18, 2011, the parties confirmed their respective agreement to the replacement of Sir William Aldous as Chairman of the Panel and that the original nominating process should be followed.

viii. Pursuant to Article 12(4) of the Rules, at its May 12, 2011 session, the Court confirmed John C. Lifland as Chairman of the Arbitral Panel.

ix. Pursuant to Article 12(4) of the Rules, the parties were invited to comment and they commented that no portion of the proceedings needed to be repeated before the reconstituted Arbitral Panel.

x. The file was sent to Mr. Lifland on May 18, 2011.

xi. After the hearings in May, 2011, the Arbitral Panel closed the proceeding on Phase 1 of the arbitration subject to briefing by the parties.

x. At its session June 16, 2011, the Court extended the time limit for rendering the Final Award until September 30, 2011.

xi. The Arbitral Panel reserves all issues except Phase 1 of the Arbitration, as well as costs, to a Final Award.

The Partial Award, Phase 1 of the Arbitration

i. Pursuant to Article 27 of the Rules, the draft Partial Award, Phase 1 was submitted to the ICC Court of Arbitration at its session of August 4, 2011.

ii. The Court approved the draft Partial Award noting the parties' agreement that the Arbitral Panel not provide reasons for its Award and accepted the parties agreement to derogate from Article 25(2) of the ICC Rules of Arbitration.

iii. As a condition of the Court's approval of the draft Partial Award, the Court asked that the parties execute a clear written agreement that:
   a. they request that the decision in relation to inventorship be recorded in an Award;
   b. the reasons for which will not be provided;
   c. sets forth the process the parties agreed would be followed; and
   d. contains a waiver of any objections to the Award being issued in this manner.

iv. By e mail to Ms. Orlowski of August 19, 2011, the parties provided such agreement captioned "AGREEMENT", signed by Ian Y. Liu on behalf of Helmholtz Center for Infection Research and Andrew W. Williams of behalf of Bristol-Myers Squibb Company , dated August 19, 2011. A copy of that agreement is Exhibit A to this Partial Award.

v. The Arbitral Tribunal is satisfied that a non-reasoned Award in Phase 1 of this Arbitration is permissible under the law applicable to that determination and the law where the Award is to be enforced.

vi. The Determination of Inventorship which constitutes the determination of the Arbitral Panel on Phase 1 (Inventorship) as approved by the Court on August 4, 2011 is Exhibit B to this Partial Award.

John C. Lifland

Arbitrator, Chair

Dated: August 25, 2011

James F. Davis

Arbitrator

Dated: Aug 25, 2011

Charles L. Gholz

Arbitrator

Dated: Aug. 25, 2011

AGREEMENT

Helmholtz Center for Infection Research ("HZI") and Bristol-Myers Squibb Company ("BMS") hereby request that (a) the decision in relation to inventorship in the ICC arbitration Case No. 16 993/VRO, be recorded in an Award, and (b) the reasons for the decision not be provided in the Award.

The parties further agree that (a) and (b) above set forth the process the parties agreed would be followed as detailed in the Terms of Reference dated September 2, 2010.

The parties waive any objections to the Award being issued in this manner.

Helmholtz Center for Infection Research	Bristol-Myers Squibb Company
Ian Y. Liu	Andrew W. Williams
Date: August 19, 2011	Date: 8/19/2011

EXHIBIT A

International Chamber of Commerce
International Court of Arbitration

HELMHOLTZ CENTER FOR INFECTION RESEARCH
(Germany)
Claimant

v.

BRISTOL-MYERS SQUIBB COMPANY
(United States)
Respondent

Case No. 16 993/VRO

DETERMINATION OF INVENTORSHIP

The Arbitrators have determined the inventorship of the patents at issue in this arbitration as follows:

U.S. PATENT NO. 7,767,432[1]

Claim 1

1. A strain of *Sorangium cellulosum* deposited as ATCC No. PTA-3880 or a strain of *Sorangium cellulosum* deposited as ATCC No. PTA-3881.

BMS Contention	GBF Contention
Brian Davis	Klaus Gerth

[1] If you find there is joint inventorship, select all the joint inventors.

EXHIBIT B

Claim 2

2. The strain of claim 1 deposited as ATCC No. PTA-3880.

BMS Contention	GBF Contention
Brian Davis	Klaus Gerth

Claim 3

3. The strain of claim 1 deposited as ATCC No. PTA-3881.

BMS Contention	GBF Contention
Brian Davis	Klaus Gerth

Claim 4

4. The strain of claim 1, wherein said strain is capable of producing epothilone B in a recoverable amount upon fermentation in a nutrient medium.

BMS Contention	GBF Contention
Brian Davis	Klaus Gerth

Claim 5

5. The strain of claim 4, wherein said strain is capable of improving the production ratio of epothilone B to epothilone A.

BMS Contention	GBF Contention
Brian Davis	Klaus Gerth

Claim 6

6. The strain of claim 5, wherein said ratio of epothilone B to epothilone A ratio is at least 1.

BMS Contention	GBF Contention
Brian Davis	Klaus Gerth

Claim 7

7. The strain of claim 6, wherein said ratio of epothilone B to epothilone A ratio is at least 1.5.

BMS Contention	GBF Contention
Brian Davis	Klaus Gerth

Claim 8

8. The strain of claim 7, wherein said ratio of epothilone B to epothilone A ratio is in the range of 1.5 to 4.0.

BMS Contention	GBF Contention
Brian Davis	Klaus Gerth

U.S. PATENT No. 7,172,884 and U.S. Reissue Patent No. RE42,191[2]

Claim 1

1. A process for isolation of epothilone B from an epothilone-producing microorganism comprising:
   (a) fermenting a strain of epothilone-producing microorganism in the presence of a resin that adsorbs epothilone B by hydrophobic interaction;
   (b) collecting the resin in a water-based medium;
   (c) extracting the resin with a solvent selected to extract epothilone B and to separate it from the water-based medium; and
   (d) crystallizing epothilone B from the extraction phase; wherein said fermentation step further comprises feeding an additive capable of improving the amount of epothilone B produced as compared with the amount of epothilone A produced.[3]

	BMS Contention	**GBF Contention**
Steps 1(a)-(d)	Steps 1(a)-(d) were well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.	Steps 1(a) and (b) were well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention. Steps 1(c) and (d) were invented by Gerhard Höfle Heinrich Steinmetz.
Propionate feeding	Thomas Tully	Klaus Gerth

[2] If you find there is joint inventorship, select all the joint inventors.
[3] Claims 1, 8, 9 and 10 of the '191 Reissue are not reproduced here; and the parties agree that the respective inventorship of claims 1, 8, 9 and 10 of the '884 patent and the '191 Reissue is the same.

Claim 2

2. The process of claim 1 wherein the crystallized epothilone B from step (d) is substantially pure.

BMS Contention	GBF Contention
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.	The additional limitations of this claim were invented by Gerhard Höfle Heinrich Steinmetz

Claim 3

3. The process of claim 1 wherein the resin is extracted with a polar solvent.

BMS Contention	GBF Contention
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.	The additional limitations of this claim were invented by Gerhard Höfle Heinrich Steinmetz

Claim 4

4. The process of claim 1 wherein said fermentation step further comprises fermenting said epothilone-producing microorganism in the presence of skim milk, soy flour, yeast extract, maltrin starch, and/or glycerol.

BMS and GBF agree:
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.

Claim 5

5. The process of claim 1 wherein said fermentation step comprises continuously feeding said additive capable of improving the ratio of epothilone B to epothilone A.

BMS Contention	GBF Contention
The additional limitations of this claim were invented by Thomas Tully.	The additional limitations of this claim were invented by Klaus Gerth

Claim 6

6. The process of claim 1 wherein said additive is a propionic acid salt or ester.

BMS Contention	GBF Contention
The additional limitations of this claim were invented by Thomas Tully	The additional limitations of this claim were invented by Klaus Gerth

Claim 7

7. The process of claim 6 wherein said additive is sodium propionate, propionic acid methyl ester or propionic acid ethyl ester.

BMS Contention	GBF Contention
The additional limitations of this claim were invented by Thomas Tully	The additional limitations of this claim were invented by Klaus Gerth

Claim 8

8. The process of claim 1 wherein the crystallization is conducted to reduce the amount of epothilone A to about 55% or less of the amount of epothilone A present after extraction step (c).

BMS Contention	GBF Contention
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.	The additional limitations of this claim were invented by Gerhard Höfle Heinrich Steinmetz

Claim 9

9. The process of claim 8 further comprising
(e) at least a second crystallization step effective to reduce the amount of epothilone A to about 55% or less of the amount of epothilone A present after crystallization step (d).

BMS Contention	GBF Contention
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.	The additional limitations of this claim ~~were invented~~ by Gerhard Höfle Heinrich Steinmetz

Claim 10

10. The process of claim 1 wherein the epothilone-producing microorganism is *Sorangium cellulosum.*

BMS and GBF agree:
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.

Claim 11

11. The process of claim 10 wherein said microorganism is *Sorangium cellulosum* strain ATCC No. PTA 3880.

BMS Contention	GBF Contention
The additional limitations of this claim were invented by Brian Davis	The additional limitations of this claim were invented by Klaus Gerth

Claim 12

12. The process of claim 10 wherein said microorganism is *Sorangium cellulosum* strain ATCC No. PTA 3881.

BMS Contention	GBF Contention
The additional limitations of this claim were invented by Brian Davis	The additional limitations of this claim were invented by Klaus Gerth

Claim 13

13. The process of claim 1 wherein the resin is a styrene/divinylbenzene-based polymer.

BMS and GBF agree:
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.

Claim 14

14. The process of claim 13 wherein the resin is present in a range of from about 0.2 w/v % to about 5.0 w/v %.

BMS and GBF agree:
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.

Claim 15

15. The process of claim 1 wherein said step (d) comprises:
(i) adding a second solvent in which epothilone B is either not soluble or sparingly soluble;
(ii) removing at least a portion of the extraction solvent; and
(iii) transitioning the resultant solvent or solvent mixture to a temperature at which epothilone B crystallizes.

BMS Contention	GBF Contention
The additional limitations of this claim were invented by Daniel Benigni	The additional limitations of this claim were invented by: Gerhard Höfle Heinrich Steinmetz

Claim 16

16. The process of claim 15 wherein the extraction solvent is ethyl acetate or MTBE, and the second solvent is toluene.

BMS Contention	GBF Contention
The additional limitations of this claim were invented by Daniel Benigni	The additional limitations of this claim were invented by: Gerhard Höfle Heinrich Steinmetz

Claim 17

17. The process of claim 1 further comprising:
(f) prior to step (c), washing the resin with aqueous acetonitrile, or aqueous methanol, or an aqueous medium comprising a detergent and an amine reagent added in base form, the aqueous medium selected to not elute epothilone B.

BMS Contention	GBF Contention
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the	The additional limitations of this claim were invented by Gerhard Höfle Heinrich Steinmetz

full invention.	

Claim 18

18. The process of claim 1, wherein step (c) further comprises polish filtering the epothilone B containing solvent.

BMS and GBF agree:
This limitation was well known in the state of the art as of the effective filing date and/or did not constitute a contribution that is not insignificant in quality when measured against the dimension of the full invention.

Claim 19

19. The process of claim 1, wherein epothilone B and epothilone A are produced in an epothilone B/A ratio of at least one.

BMS Contention	**GBF Contention**
The additional limitations of this claim were invented by Thomas Tully	The additional limitations of this claim were invented by Klaus Gerth

Claim 20

20. The process of claim 1, wherein epothilone B and epothilone A are produced in an epothilone B/A ratio of at least 1.5.

BMS Contention	**GBF Contention**
The additional limitations of this claim were invented by Thomas Tully	The additional limitations of this claim were invented by Klaus Gerth

Claim 21

21. The process of claim 1, wherein epothilone B and epothilone A are produced in an epothilone B/A ratio in the range of 1.5 to 4.0.

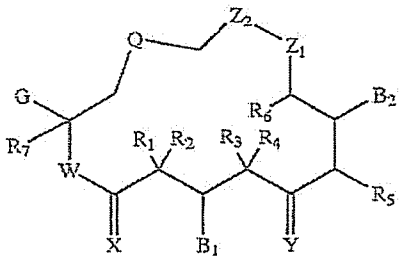
BMS Contention	GBF Contention
The additional limitations of this claim were invented by Thomas Tully	The additional limitations of this claim were invented by Klaus Gerth

U.S. Patent No. 6,605,599

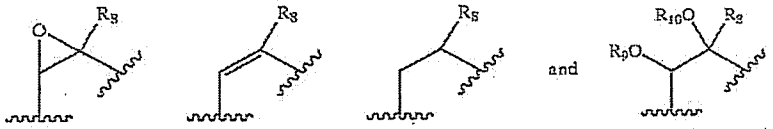
GBF does not contend that Gregory Vite, Soong-Hoon Kim, Robert Borzilleri and James Johnson should be removed as inventors.

Claim 1

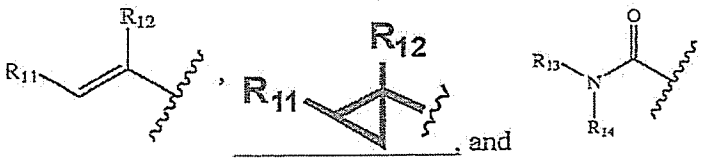
1. A compound of the formula



wherein:
Q is selected from the group consisting of:



G is selected from the group consisting of alkyl; **substituted alkyl**; substituted aryl; a 4 to 7 membered monocyclic, 7 to 11 membered bicyclic, or 10 to 15 membered tricyclic saturated or unsaturated ring system having between 1 and 3 heteroatoms selected from nitrogen, oxygen, and sulfur;



W is O or NR_{15};
X is O or H, H;
* * * * * *[4]
or pharmaceutically acceptable salts thereof, hydrates, solvates or geometric, optical or stereoisomers thereof;
with the proviso that compounds wherein
W and X are both O; and
R_1; R_2 and R_7 are H; and
R_3, R_4 and R_6 are methyl; and
R_8 is H or methyl; and

[4] For the sake of brevity, certain limitations of the claims not at issue here have been deleted and replaced with asterisks.

G is 1-methyl-2-(substituted-4-thiazolyl)ethenyl; and
Q is as defined above are excluded.

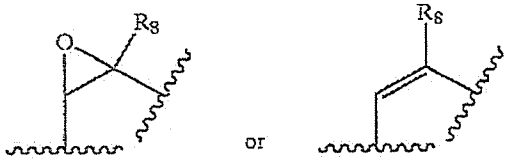
(emphasis added by GBF)

BMS Contention	GBF Contention[5]
No additional inventors should be named	Additional inventor(s): Florenz Sasse Gerhard Höfle

The parties agree that the inventorship of dependent claims 4-7, 11, 12, 25, 33-37, and 45 is the same as the inventorship of claim 1.

Claim 2

2. The compound of claim 1 wherein
Q is



X is O;
Y is O;
Z_1, and Z_2, are CH_2; and
W is NR_{15}.

BMS Contention	GBF Contention
No additional inventors should be named	Additional inventor(s): Florenz Sasse Gerhard Höfle

The parties agree that the inventorship of dependent claims 26, 38, and 46 is the same as the inventorship of claim 2.

Claim 3

3. A compound selected from the group consisting of:

* * * * * *

[5] GBF contends that it is the inventor of the '599 patent for the additional reason that it invented cyclopropyl and substituted alkyl groups as a part of substituent G in claim 1.

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-8,8,10,12,16-pentamethyl-3-[l-methyl-2(2-methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione;

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-8,8,10,12-tetramethyl-3-[l-methyl-2-(2methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-5,5,7,9,13-pentamethyl-16-[l-methyl-2-(2-methyl-4thiazolyl)ethenyl]-l-aza-13-cyclohexadecene-2,6-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-5,5,7, 9-tetramethyl-16-[l-methyl-2-(2-methyl-4-thiazolyl) ethenyl]-l-aza-13-cyclohexadecene-2,6-dione;

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-4,8,8,10,12,16-hexamethyl-3-[l-methyl-2(2-methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione;

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-4,8,8,10,12-pentamethyl-3-[l-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-l,5,5, 7,9,13-hexamethyl-16-[l-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-l-aza-13-cyclohexadecene-2,6-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-l,5,5, 7,9-pentamethyl-16-[l-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-l-aza-13-cyclohexadecene-2,6-dione;

* * * * * *

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-8,8,10,12,16-pentamethyl-3-[l-methyl-2-(2-methyl-4-thiazolyl)cyclopropyl]-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione;

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-8,8,10,12-tetramethyl-3-[l-methyl-2-(2-methyl-4-thiazolyl)cyclopropyl]-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-5,5,7,9,13-pentamethyl-16-[l-methyl-2-(2-hydroxymethyl4-thiazolyl)ethenyl]-l-aza-13(Z)-cyclohexadecene-2,6-dione;

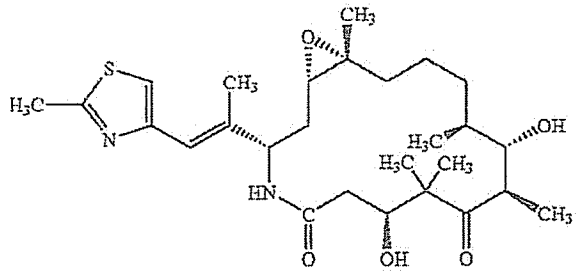
and the pharmaceutically acceptable salts, solvates and hydrates thereof.

BMS Contention	GBF Contention
No additional inventors should be named	Additional inventor(s): Florenz Sasse Gerhard Höfle

The parties agree that the inventorship of dependent claims 27, 39, and 47 is the same as the inventorship of claim 3.

Claim 8

8. A compound having the formula



or a pharmaceutically acceptable salt, hydrate, solvate, geometrical isomer, optical isomer or stereoisomer thereof.

BMS Contention	GBF Contention
BMS requests that the Panel select from the following inventors: Gregory Vite Soong-Hoon Kim Robert Borzilleri No additional inventors should be named. GBF does not contend that any of the named inventors should be removed from the patent.	Additional inventor(s): Florenz Sasse Gerhard Höfle

The parties agree that the inventorship of dependent claims 9, 10, 28, 40, and 48 is the same as the inventorship of claim 8.

Claim 13

13. The compound of claim 1, wherein G is 1-methyl-2(substituted-4-thiazolyl) ethenyl group.

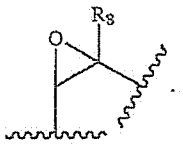
BMS Contention	GBF Contention
No additional inventors should be named	Additional inventor(s): Florenz Sasse Gerhard Höfle

The parties agree that the inventorship of dependent claims 17, 18, 29, 41, and 49

is the same as the inventorship of claim 13.

Claim 14

14. The compound of claim 1, wherein Q is



BMS Contention	GBF Contention
No additional inventors should be named	Additional inventor(s): Florenz Sasse, Gerhard Höfle

The parties agree that the inventorship of dependent claims 19, 20, 30, 42, and 50 is the same as the inventorship of claim 14.

Claim 15

15. The compound of claim 1, wherein W is NR_{15}.

BMS Contention	GBF Contention
No additional inventors should be named	Additional inventor(s): Florenz Sasse, Gerhard Höfle

The parties agree that the inventorship of dependent claims 21, 22, 31, 43, and 51 is the same as the inventorship of claim 15.

Claim 16

16. The compound of claim 1, wherein X and Y are each O.

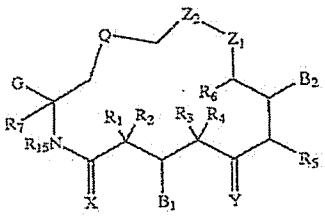
BMS Contention	GBF Contention
No additional inventors should be named	Additional inventor(s): Florenz Sasse, Gerhard Höfle

The parties agree that the inventorship of dependent claims 23, 24, 32, 44, and 52

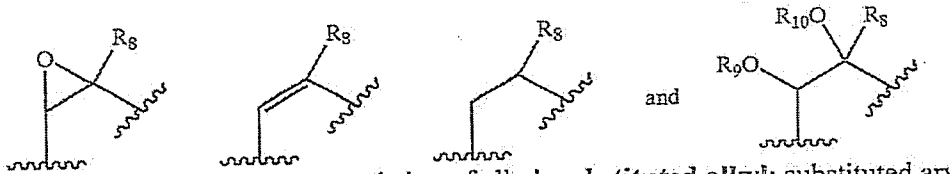
is the same as the inventorship of claim 16.

Claim 53[6]

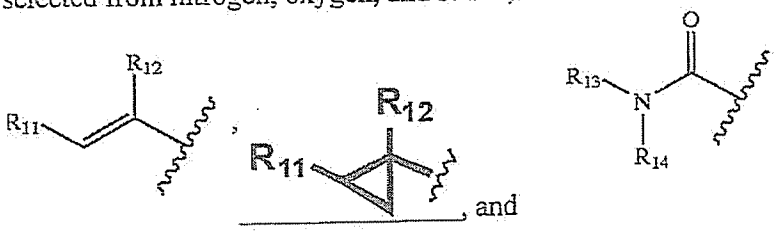
53. A compound of the formula



wherein:
Q is selected from the group consisting of:



G is selected from the group consisting of alkyl; **substituted alkyl**; substituted aryl; a 4 to 7 membered monocyclic, 7 to 11 membered bicyclic, or 10 to 15 membered tricyclic saturated or unsaturated ring system having between 1 and 3 heteroatoms selected from nitrogen, oxygen, and sulfur;



X is O or H, H;
* * * * * *
or pharmaceutically acceptable salts thereof, hydrates, solvates or geometric, optical or stereoisomers thereof.

(emphasis added by GBF)

BMS Contention	GBF Contention
No additional inventors should be	Additional inventor(s):

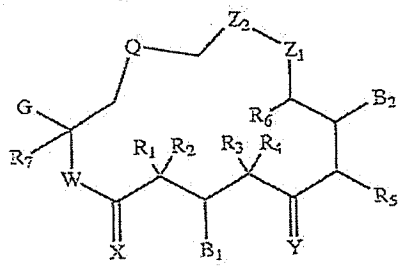
[6] GBF contends that it is the inventor of the '599 patent for the additional reason that it invented cyclopropyl and substituted alkyl groups as a part of substituent G in claim 53.

named	Florenz Sasse Gerhard Höfle

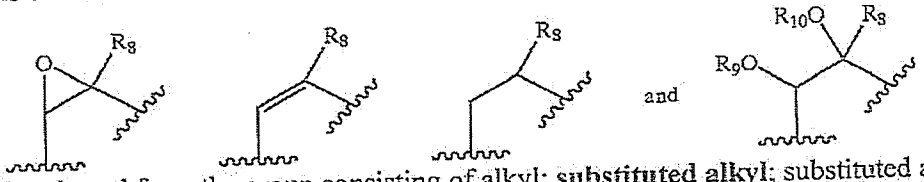
The parties agree that the inventorship of dependent claims 54-61 is the same as the inventorship of claim 53.

Claim 62[7]

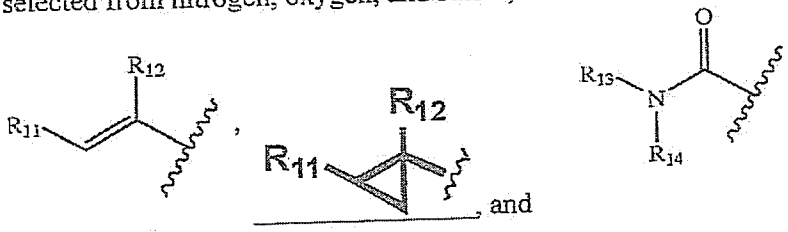
62. A compound of the formula:



wherein:
Q is selected from the group consisting of:



G is selected from the group consisting of alkyl; **substituted alkyl**; substituted aryl; a 4 to 7 membered monocyclic, 7 to 11 membered bicyclic, or 10 to 15 membered tricyclic saturated or unsaturated ring system having between 1 and 3 heteroatoms selected from nitrogen, oxygen, and sulfur;



W is O or NR15;
X is O or H, H;

* * * * * *

or pharmaceutically acceptable salts thereof, hydrates, solvates or geometric, optical or stereoisomers thereof;
wherein substituted alkyl is an alkyl group substituted with from one to four substituents selected from the group consisting of halo; trifluoromethyl;

[7] GBF contends that it is the inventor of the '599 patent for the additional reason that it invented cyclopropyl and substituted alkyl groups as a part of substituent G in claim 62.

trifluoromethoxy; hydroxy; alkoxy; cycloalkoxy; heterocyclooxy; oxo; alkanoyl; aryloxy; alkanoyloxy; amino; alkylamino; arylamine; aralkylamino; cycloalkylamino; heterocycloamino; disubstituted amines wherein the substituents are selected from alkyl, aryl, and aralkyl; alkanoylamino; optionally substituted with halogen, alkyl, alkoxy, aryl, or araralkyl; arylamino optionally substituted with halogen, alkyl, alkoxy, aryl, or araralkyl; aralkanoylamino optionally substituted with halogen, alkyl, alkoxy, aryl, or araralkyl; thio; alkylthio; aralkylthio; cycloalkylthio; heterocyclothio; alkylthiono; arylthiono; aralkylthiono; alkylsulfonyl; arylsulfonyl; aralkylsulfonyl; sulfonamide optionally substituted with halogen, alkyl, alkoxy, aryl, or araralkyl; nitro; cyano; carboxy; carbamyl optionally substituted with halogen, alkyl, alkoxy, aryl, or araralkyl; alkoxycarbonyl; aryl; substituted aryl; guanidino; and heterocyclo; and

substituted aryl is an aryl group substituted with from one to four substituents selected from the group consisting of alkyl; substituted alkyl; halo; trifluoromethyl; trifluoromethoxy; hydroxy; alkoxy; cycloalkoxy; heterocyclooxy; alkanoyl; alkanoyloxy; amino; alkylamino; aralkylamino; cycloalkylamino; heterocycloamino; dialkylamino; alkanoylamino; thio; alkylthio; cycloalkylthio; heterocyclothio; ureido; nitro; cyano; carboxy; carboxyalkyl; carbamyl; alkoxycarbonyl; alkylthiono; arylthiono; alkylsulfonyl; sulfonamide; and aryloxy each of which may be optionally substituted with halo, hydroxy, alkyl, alkoxy, substituted aryl, substituted alkyl, or substituted aralkyl;

with the proviso that compounds wherein

W and X are both O; and

R_1; R_2 and R_7 are H; and

R_3, R_4 and R_6 are methyl; and

R_8 is H or methyl; and

G is 1-methyl-2-(substituted-4-thiazolyl)ethenyl; and

Q is as defined above are excluded.

(emphasis added by GBF)

BMS Contention	GBF Contention
No additional inventors should be named	Additional inventor(s): Florenz Sasse Gerhard Höfle

U.S. Patent No. 7,125,899

The parties agree that the inventorship of all claims of U.S. Patent No. 7,125,899 should be the same as for claim 8 of U.S. Patent No. 6,605,599.

U.S. Reissue Patent No. 41,911

The parties agree that the inventorship of all claims of U.S. Reissue Patent No. 41,911 is the same as for claim 8 of U.S. Patent No. 6,605,599.

Dated this 11th day of July, 2011

The Honorable John C. Lifland, Chairman

/s/ James F. Davis
The Honorable James F. Davis

/s/ Charles L. Gholz
Charles L. Gholz, Esq.

ICC INTERNATIONAL COURT OF ARBITRATION

CASE No. 16993/VRO

HELMHOLTZ CENTER FOR INFECTION RESEARCH (Germany)

vs/

BRISTOL-MYERS SQUIBB COMPANY (U.S.A.)

This document is an original of the Addendum to the Partial Award rendered in conformity with the Rules of the ICC International Court of Arbitration

International Chamber of Commerce
International Court of Arbitration

HELMHOLTZ CENTER FOR
INFECTION RESEARCH
(Germany)
Claimant

Case No. 16 993/VRO

v.

BRISTOL-MYERS SQUIBB
COMPANY
(United States)
Respondent

ADDENDUM

The Arbitral Tribunal rendered a Partial Award dated 25 August 2011, which was noticed to the Parties by the Secretariat on 26 August 2011. It was received by the parties on 29 August 2011 and is timely pursuant to Article 29(1) of the Rules. On 22 September, 2011 the Tribunal, through the Chair, notified the Secretariat that the Parties and the Panel of Arbitrators all agreed that there was a minor error in the Determination of Inventorship in the Partial Award. On 25 October, 2011 the Secretariat responded to that notification and invited the Tribunal to submit an Addendum reflecting the decision to correct the Partial Award.

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Accordingly, the Tribunal submits this ADDENDUM pursuant to Article 29(3) of the Rules. It shall constitute part of the Partial Award, and corrects the Determination of Inventorship in the Partial Award in

accordance with the Agreement of the Parties dated 22 September 2011, attached hereto. The correction is that Page 14 attached to the Agreement of the Parties shall be substituted for the original Page 14 of the Partial Award. The Tribunal fully concurs with the Agreement of the Parties.

Dated this 25th day of November, 2011 at New York, N.Y., U.S.A.

The Honorable John C. Lifland, Chair

The Honorable James F. Davis

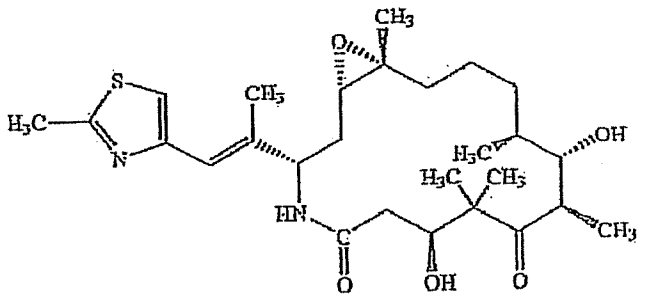
Charles F. Gholz, Esq.

AGREEMENT

Helmholtz Center for Infection Research ("HZI") and Bristol-Myers Squibb Company ("BMS") (collectively, "the Parties") hereby agree and stipulate that the following compounds listed in the Determination of Inventorship are identical:

- The first compound listed in the excerpt of Claim 3 of the '599 patent, at page 14 of the Determination of Inventorship, [1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxyl-8,8,10,12,16-pentamethyl-3-[1-methyl-2(2-methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione; and

- The compound of Claim 8 of the '599 patent, at page 15 of the Determination of Inventorship,



In light of this stipulation, the Parties hereby jointly request that the Arbitral Tribunal correct, pursuant to Article 29(1) of the Rules of Arbitration, the Partial Award dated August 25, 2011 in the ICC arbitration Case No. 16 993/VRO by substituting the original page 14 of the Determination of Inventorship in the Partial Award with the attached substitute page 14.

Helmholtz Center for Infection Research	Bristol-Myers Squibb Company
Ian Y. Liu	S. Richard Carden
Date: September 22, 2011	Date: 22 September 2011

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-8,8,10,12,16-pentamethyl-3-[l-methyl-2(2-methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione;

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-8,8,10,12-tetramethyl-3-[l-methyl-2-(2methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-5,5,7,9,13-pentamethyl-16-[l-methyl-2-(2-methyl-4thiazolyl)ethenyl]-l-aza-13-cyclohexadecene-2,6-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-5,5,7, 9-tetramethyl-16-[l-methyl-2-(2-methyl-4-thiazolyl) ethenyl]-l-aza-13-cyclohexadecene-2,6-dione;

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-4,8,8,10,12,16-hexamethyl-3-[l-methyl-2(2-methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione;

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-4,8,8,10,12-pentamethyl-3-[l-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-4-aza-17-oxabicyclo[14.1.0]heptadecane-5,9-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-l,5,5, 7,9,13-hexamethyl-16-[l-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-l-aza-13-cyclohexadecene-2,6-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-l,5,5, 7,9-pentamethyl-16-[l-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-l-aza-13-cyclohexadecene-2,6-dione;

* * * * * *

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-8,8,10,12,16-pentamethyl-3-[l-methyl-2-(2-methyl-4-thiazolyl)cyclopropyl]-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione;

[1S-[1R*,3R*(E),7R*,10S*,11R*,12R*,16S*]]-7,11Dihydroxy-8,8,10,12-tetramethyl-3-[l-methyl-2-(2-methyl-4-thiazolyl)cyclopropyl]-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione;

[4S-[4R*,7S*,8R*,9R*,15R*(E)]]-4,8-Dihydroxy-5,5,7,9,13-pentamethyl-16-[l-methyl-2-(2-hydroxymethyl4-thiazolyl)ethenyl]-l-aza-13(Z)-cyclohexadecene-2,6-dione;

and the pharmaceutically acceptable salts, solvates and hydrates thereof.

BMS Contention	**GBF Contention**
☐ No additional inventors should be named	Additional inventor(s): Florenz Sasse, Gerhard Höfle

The parties agree that the inventorship of dependent claims 27, 39, and 47 is the same as the inventorship of claim 3.